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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
BLAN, NICOLE R	

ART UNIT	PAPER NUMBER
1792	

NOTIFICATION DATE	DELIVERY MODE
12/18/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/822,748	KIM ET AL.	
	Examiner	Art Unit	
	NICOLE BLAN	1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 September 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15,21-27 and 30-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *8-15,21-27 and 30-34* is/are allowed.

6)☒ Claim(s) *1-7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. The amendments to claims 8, 11, 21, 23 and 24 filed on September 18, 2008 have been acknowledged. Currently, claims 1-15, 21-27 and 30-34 are pending.

Response to Arguments

2. Applicant's arguments filed September 18, 2008 have been fully considered but they are not persuasive.

3. In response to applicant's argument regarding Kenreich not disclosing a mist generating device, the Examiner respectfully disagrees. The claim states "... a mist generating device *adapted to* convert water to mist ...". It has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.

Furthermore, it is fundamental that an apparatus claim defines the structure of the invention and not how the structure is used in a process, or what materials the structure houses in carrying out the process. *Ex parte Masham*, 2 USPQ2d 1647, 1648 (BPAI 1987). See also *In re Yanush*, 477 F.2d 958, 959, 177 USPQ 705,706 (CCPA 1973); *In re Finsterwalder*, 436 F.2d 1028, 1032, 168 USPQ 530, 534 (CCPA 1971); *In re Casey*, 370 F.2d 576, 580, 152 USPQ 235,238 (CCPA 1967). As long as the apparatus of Kenreich is capable of converting water to mist, the prior art apparatus meet the requirements of the claimed feature. Applicant has not established on this record any structural distinction between apparatus within the scope of the

rejected claims and the apparatus fairly described by Kenreich, and no such structural distinction is apparent.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Kenreich et al. (U.S. Patent 3,180,037, hereinafter '037).

Claim 1: '037 teaches an apparatus for bleaching fabrics [reads on "laundry machine"; title; col. 1, lines 10-12] comprising: a cabinet [(11), Fig. 3, col. 1, line 57]; a drum mounted in the cabinet [(12), Fig. 3, col. 1, line 58]; a mist generating device [(128), Fig. 3, col. 2, lines 50-61] which supplies mist into the drum [see Fig. 3]; and a mist transporting conduit having an inlet and an outlet, the mist transporting conduit being arranged downstream from the mist generating device, the inlet being connected to the mist generating device and the outlet arranged to deliver mist to the drum [(131) to conduit near reference number (19), Fig. 3, col. 2, lines 50-61].

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over '037 as applied to claim 1 above, and further in view of Muhr (U.S. Patent 6,117,219, hereinafter '219).

Claim 2: '037 teaches the limitations of claim 1 above. They do not explicitly teach an atomizing means comprising: a case, diffusion means, and a blowing fan in order to define a flow of passage and circulation for the atomized water. However, '219 teaches atomizing means comprising a case [(1), Fig. 1, pg. 2, col. 4, line 1], diffusion means [(11), Fig. 1, col. 4, lines 19-26], and a blowing fan [(15), Fig. 1, col. 4, line 33] in order to provide for circulation of the atomized water. The selection of something based on its known suitability for its intended use has been held to support *prima facie* cases of obviousness. Therefore, it would have been

obvious to one of ordinary skill in the art at the time the invention was made to have used the atomizer of '219 as the particular atomizer of '037 with a reasonable expectation of success because '219 teaches a suitable atomizing means.

9. Claims 3-4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over '037 and '219, and further in view of Kwok (U.S. Patent 4,684,064, hereinafter '064).

Claim 3: '037 and '219 teach the limitations of claim 2 above. They do not teach a diffusion means containing at least one centrifugal plate to be rotated about an axis passing through a center by a driving force or a diffusion net arranged around the centrifugal plate in order to diffuse wash water radially from the plate in an atomized state. The Examiner takes Official Notice that it is common knowledge to one of ordinary skill in the art of providing atomized fluids that a centrifugal atomizer would be used in order to radially displace the water and that a mesh screen would prevent the water droplets from merging into larger globules. See, for example, '064, that teaches a diffusion means by providing a diffusion net [(30), Fig. 2, col. 4, lines 1] that is arranged around the centrifugal plate, and adapted to diffuse wash water radially projected from the centrifugal plate in an atomized state [col. 4, lines 1 – 34] and at least one centrifugal plate [(16), Fig. 2] adapted to be rotated about an axis passing through a center thereof by a driving force [(11), Fig. 2] [col. 4, lines 3 – 17] in order to prevent the droplets from merging into large globules. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a centrifugal atomizer in order to prevent the smaller water droplets from merging into larger globules.

Claim 4: '037, '219, and '064 teach the limitations of claim 3 above. In addition, '064 teaches that at least one centrifugal plate [(14) and (16) fastened together with a pin (17), Fig. 1] comprises a plurality of centrifugal plates [(16 – inner plate) and (14 – outer plate)] axially spaced apart from one another [see spaces located above 24a and 34b] [Fig. 1, col. 4, lines 1 – 34].

Claim 6: '037 teaches the limitations of claim 1 above, '219 renders the use of a case and blowing fan obvious for the reasons applied to claim 2 above. '219 further teaches a driving means adapted to rotate the blowing fan [(17), Fig. 1, col. 4, lines 36-42]. '064 renders the use of a centrifugal plate and diffusion net obvious for the reasons applied to claim 3 above. '064 further teaches a driving means adapted to rotate the centrifugal plate [(11), Fig. 2] [col. 4, lines 3 – 17].

10. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over '037, '219, and '064 as applied to claim 3 above, and further in view of Gafner (U.S. Patent 6,183,175, hereinafter '175).

Claim 5: '037, '219, and '064 teach the limitations of claim 3 above. They do not teach a spray drum type washing machine wherein the centrifugal plate and the blowing fan are rotated by a dual-shaft motor adapted to generate the driving force. The Examiner takes Official Notice that it is common knowledge to one of ordinary skill in the art of rotary devices that a dual-shaft motor can be used to rotate two objects such as the centrifugal plates and the fan of the application. See, for example, '175, which teaches that electric motors with concentric shafts are

suitable driving means and that a dual-shaft motor contains two concentric drive shafts. These drive shafts can be represented by the coupling of two electric motors seated one behind the other as show in Figure 6 of '175 [col. 2, lines 19 – 30] to rotate two separate devices. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a dual-shaft motor as the driving force to rotate the centrifugal plate and the blowing fan because it is a suitable tool for rotating two drive shafts.

11. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over '037 as applied to claim 1 above, and further in view of Tanigawa et al. (U.S. Patent 5,887,456, hereinafter '456).

Claim 7: '037 teaches the limitations of claim 1 above. It does not explicitly teach a diffusion nozzle at the outlet of the mist transporting conduit. The Examiner takes Official Notice that it is common knowledge to one of ordinary skill in the art of liquid delivery that a nozzle can be used to supply a liquid into a container. See, for example, '456, which teaches a nozzle at the outlet of a conduit in order to supply liquid into the container [(59), Fig. 7, col. 11, lines 15-19]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a nozzle as the means to supply liquid into a container because it is a suitable means to supply liquid into a container.

Allowable Subject Matter

12. Claims 8-15, 21-27 and 30-34 are allowed.

13. The following is an examiner's statement of reasons for allowance:

Tanigawa et al. teaches a drum type washing machine capable of converting water into mist and mist into vapor by using two circulation lines. However, Tanigawa does not teach that the circulation line includes both the mist generating device and the steam generator, as required by claim 8 and 26. Furthermore, Tanigawa does not teach a water transporting conduit with an inlet and an outlet in which the inlet is adapted to receive water from the drum, and the outlet is connected to the mist generating device. Thus, the art of record does not fairly teach or suggest a laundry machine comprising a mist generating device and steam generating device included in the circulation line.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NICOLE BLAN whose telephone number is (571)270-1838. The examiner can normally be reached on Monday - Thursday 8-5 and alternating Fridays 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Cleveland can be reached on 571-272-1418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/N. B./
Examiner, Art Unit 1792

/Michael Cleveland/
Supervisory Patent Examiner, Art Unit 1792